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HEALTH CARE PROFESSIONALS INTEGRATIVE MEDICINE

Health Care Professionals' Experiences Practicing Integrative Medicine

by

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MSW Clinical Research Paper

Presented to the Faculty of the
School of Social Work
St. Catherine University and the University of St. Thomas
St. Paul, Minnesota
In Partial fulfillment of the Requirements for the Degree of
Master of Social Work

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The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

Abstract

The practice of integrative medicine has regained popularity in recent years. As a theoretical framework, integrative medicine is a viable option to consider in place of a traditional medicine model from a patient satisfaction and cost savings viewpoint. The purpose of this paper was to explore the experiences and viewpoints of healthcare professionals in regards to practicing integrative medicine. The Health Belief Model was used as a conceptual framework. Using a quantitative design, health care professionals across a variety of disciplines were recruited from three agencies within the Midwest who currently provide services to patients with an integrative medicine model. A bivariate analysis of the findings was completed utilizing data gathered about health care professionals' length in practice, professional education experiences and beliefs about factors that contribute to patient's adherence to treatment plans. The findings reinforced existing research that in vivo educational experiences have great potential for providing health care professionals opportunities to practice integrative medicine across disciplines. The findings also confirmed that there is a further need for education about the integrative medicine model across all health care disciplines. These findings demonstrate the potential impact social workers can have in the field of integrative medicine through their holistic views of patients and their abilities to lead other health care professionals through promotion of patient health and satisfaction.

Keywords: health care professional, integrative medicine

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Introduction

Heart disease, stroke, diabetes and asthma are not only the most common health conditions in the United States but they have also been found to be the most costly and preventable according to the Centers for Disease Control and Prevention (Guarneri, Horrigan & Pechura, 2010). Additionally, it is estimated that over 70 percent of deaths in the United States are due to chronic disease (Maizes, Rakel & Niemiec, 2009a). There are very little, if any, areas of discipline that allow such an incongruous dichotomy to exist. Indeed, despite ever growing evidence suggesting that modern medicine's treatment approaches are no longer working, the medical community has been sluggish in its response to demands for new treatment models of care for these chronic conditions as well as many others. Recently, integrative medicine approaches that were laid to rest thirty or forty years ago have been given new life. No longer collecting dust on the shelf, integrative medicine has been thrust into the limelight of the medical community as a glowing example of the potential positive changes the health care system needs to reduce cost and improve patient health and wellbeing.

The current health care system is fragmented and uncoordinated; there is a need for more collaboration in the best interest of patients (Hultberg, Lonnroth & Allebeck, 2003; Katz & Ali, 2009; Maizes, et al., 2009b). Health care that is mismanaged or not managed at all directly affects patients while also costing the public at large millions of taxpayer dollars (Katz & Ali, 2009). Within the past twenty years a growing body of research has emerged that has demonstrated the sheer cost of appropriately treating chronic health conditions. Chronic conditions now account for over one third of national health care expenditures (Bodenheimer, Wagner & Grumbach, 2002; Oxman, Bjorndal, Flottorp, Lewin & Lindahl, 2008). However, cost containment and even cost savings through an integrative medicine approach can be achieved by

simultaneously developing ways to lower utilization of expensive interventions while taking advantage of more client centered treatment modality (Guarneri, et al., 2010; Katz & Ali, 2009). Studies have repeatedly shown that practicing preventative health care rather than reactive health care with patients can provide more timely and cost effective services while also reducing the burden chronic conditions have on the health care system (Maizes, et al., 2009a; Maizes, Rakel & Niemiec, 2009b).

Integrative medicine is a growing area of research that demonstrates not only the value of a diversion from a medical model financially, but provides an opportunity for collaborative approaches to treatment that may lead to opportunities for more comprehensive (and thereby more successful) interventions (Hultberg, et al., 2005; Maizes, et al., 2009b; Sommers, Marton, Barbaccia & Randolph, 2000). Ambivalent relationships between health care professionals (HCPs) have given way to collaboration in the interest of promoting patient care (Maizes, et al., 2009b; Schilling & Schilling, 1987). Additionally, integrative medicine provides health care professionals from a variety of disciplines an opportunity to expand their own skill sets and better understand complex and comorbid health concerns (Katz & Ali, 2009; Maizes, et al. 2009b). While most health care professionals agree that integrative medicine has the potential for improving patient health outcomes and decrease health care costs, the current research has not consistently provided support for integrative medicine (Katz & Ali, 2009; Maizes, et al. 2009b). Moreover, there are no current, standardized models of integrative medicine that have been widely applied across disciplines (Brawer, Martielli, Pye, Manwaring & Tierney, 2010; Holst, H. & Severinsson, E., 2003; Katz & Ali, 2009; Kharicha, Levin, Iliffe & Davey, 2004; Maizes, et al. 2009b).

As integrative medicine continues to gain momentum, the field of social work has an

opportunity to become a leader in facilitating appropriate and effective patient health care. The framework of integrative medicine strongly emphasizes focusing on psycho-emotional factors that are very often overlooked by many health care professionals (Katz & Ali, 2009). Social workers in particular can help health care professionals evaluate patient's biopsychosocial needs and advocate for a more autonomous approach to patient care provided their professional training and philosophy about treating clients. Utilizing information available from previous integrative medicine practice can help social workers identify areas of opportunity for creating an environment where health care professionals from a variety of disciplines can coordinate care in the best interest of their patients. Lastly, social workers may have the best opportunity to gain access to primary care clinics due to their already transient nature in many clinical settings (Kharicha et al., 2004).

Current literature suggests that integrative medicine can best be introduced to health care professionals through in vivo experiences that are integrated into higher education curriculum (Allen-Meares, 2000; Bray & Rogers, 1995; Maizes, et al., 2009b). An additional way health care professionals are exposed to integrative medicine is through continued professional education including seminars and workshops. Health care professionals who work towards building and expanding their current skill sets are more likely to have better outcomes with their patients (Katz & Ali, 2009). Health care professionals who practice integrative medicine within their own lives are more likely to encourage patients to pursue integrative medicine treatment as well (Katz & Ali, 2009).

In order to better understand the benefits of implementing interdisciplinary care into the health care system, the history of integrated medicine, the opportunities it may provide and the role social workers can play in this implementation must be discussed in further detail.

Literature Review

This literature review explores the practice of integrative medicine including its definition, origins and potential to provide collaborative care that promotes improving patient health through integrated services and patient-centered care. Unlike traditional medical models, integrative medicine intrinsically allows social workers to be an active participant in patient-centered care. The holistic view of patients provides social workers opportunities to advocate for ensuring patients' psychosocial needs are evaluated, honored and respected.

Integrative Medicine

Defining integrative medicine. At its core, integrative medicine is about patient-centered treatment (Maizes et al., 2009a). This treatment approach synthesizes traditional and holistic models of medicine into one discipline that promotes a more consumer driven focus, including supporting patient health through establishing a trusting relationship, promoting patient wellness and encouraging embracing healthy lifestyle changes. Integrative medicine is also known by many other terms including interdisciplinary medicine, complementary and alternative medicine, collaborative care and patient-centered care (Maizes et al., 2009a). While the researcher acknowledges that each of these terms may imply slightly different services being rendered, for the purposes of this paper, the term integrative medicine was used to represent all of the aforementioned terms. There are many definitions of integrative medicine but for the purposes of this paper integrative medicine was defined as an intervention that involves patient-centered care with a focus on preventative medicine and treatment approaches that include traditional and holistic consideration.

Integrative medicine can be defined very broadly but there is a consensus among researchers that at a minimum, an interdisciplinary team consists of a physician, a nurse or medical assistant

and social worker or other mental health professional (Maizes et al., 2009a; Maizes et al., 2009b). Many researchers further define integrative medicine based on patient specific needs. The types of services specialized providers render may be seen more as a secondary or acute level of intervention rather than a core part of the team (Hultberg et al., 2005). The practice of integrative medicine implies that health care professionals have an established relationship with his/her patients such that they can adequately respond to the patients needs whether he/she can explicitly express them (Maizes et al., 2009a).

Integrative medicine can also be seen through the eyes of a preventative care model (Katz & Ali, 2009). While traditional medicine provides treatment through a disease management model, integrative medicine works backwards from management of the disease with the ultimate goal of prevention through a three-tiered approach: primary, secondary and tertiary prevention. Primary prevention focuses on health promotion and targeted prevention of specific diseases (Katz & Ali, 2009). This portion of the model focuses on supporting patients' positive feelings and vitality. Moreover, primary prevention identifies and implements specific actions that can be taken to prevent common ailments and diseases. Some examples include ear protection for those who will be experiencing high noise levels or vaccinations for a variety of diseases prevalent in the community. Secondary prevention refers to identifying potential risk factors of a disease through symptom evaluation and administration of health screenings. This stage of prevention seeks to mitigate symptoms already manifesting themselves and to either prevent or slow down the progression of disease. A health care professional diagnosing and treating a patient with hypertension is a form of secondary prevention. Lastly, tertiary prevention seeks to slow the progression of disease to disability or death. This method of prevention seeks to provide treatment or rehabilitation that will preserve existing activities of daily living. If a patient has

experienced a heart attack, the health care professional may encourage the patient to begin an exercise regimen or stop smoking in an attempt to prevent or delay another heart attack. These examples of preventative approaches to a patient's health care demonstrate the aspect of integrative medicine that focuses on both the medical model as well as emphasizes the importance of encouraging the patient to play an active role in their treatment.

Role of the Social Worker within Integrative Medicine

Social workers are in a unique position to bridge the gap between physicians and their patients (Hultberg et al., 2005; Lechman & Duder, 2009; Lesser, 2000; Sommers et al., 2000). A shift in social work roles within the hospital setting has already occurred (Auerbach, Mason & Laporte, 2007; Lechman & Duder, 2009). In hospital settings, social workers spend less time on administrative tasks including assessments and documentation and more time on integrative tasks such as supportive counseling and collaboration (Lechman & Duder, 2009). While integrative medicine is not yet routinely practiced in outpatient settings, it is becoming increasingly common (Allen-Meares, 2000; Bray & Rogers, 1995; Higgins, 1994; Hultberg, et al., 2005; Lesser, 2000).

Social workers also play an important role in integrative medicine through their commitment to advocating for social justice. Through social justice principles such as community and the common good, governance and rights and responsibilities social workers demonstrate the value that can be provided on a micro, mezzo and macro level of practice (University of St Thomas & St Catherine University [UST & SCU], 2006). Social workers cannot only identify a patient's biopsychosocial needs but assist medical professionals with understanding the interaction between medical and mental health diagnoses (Higgins, 1994; Hultberg et al., 2005; Lesser, 2000; Vongxaiburana, Thomas, Frahm & Hyer, 2011).

Additionally, they can help patients learn how to become their own advocates and understand how they can take a proactive role in managing their health (Maizes, et al., 2009b). This could include helping patients make treatment decisions while taking into account his/her biopsychosocial selves: decisions based on his/her diagnoses, treatment options, values and belief systems. Social workers, therefore, are uniquely and innately capable of participating in and facilitating integrative medicine approaches within the medical community.

The National Association of Social Work (NASW) code of ethics also guides social workers in the practice of integrative medicine. The Interdisciplinary Collaboration section of the NASW code of ethics (Section 2.03) states (NASW, 2008):

- a. Social workers who are members of an interdisciplinary team should participate in and contribute to decisions that affect the wellbeing of clients by drawing on the perspectives, values and experiences of the social work profession. Professional and ethical obligations of the interdisciplinary team as a whole and of its individual member should be clearly established.
- b. Social workers for whom a team decisions raises ethical concerns should attempt to resolve the disagreement through appropriate channels. If the disagreement cannot be resolved, social workers should pursue other avenues to address their concerns consistent with client wellbeing.

The above criteria outlined by the NASW code of ethics acknowledges social workers' roles in the practice of integrative medicine and reinforces the opportunity for them to be a leader in this area of practice provided their ability to evaluate patients psychosocial needs. Additionally, social workers have an obligation to be cognizant of discrepancies between health care professionals and patient care treatment options. Provided its focus on the importance of

communication between team members practicing integrative medicine, the NASW code of ethics is an ideal set of values social workers can rely as a foundation to work off of while working to identifying their place in integrative medicine.

Complementary Alternative Medicine. Complementary alternative medicine is closely related to integrative medicine (Katz & Ali, 2009). Its focus can be broken down into the separate parts of the term. Complementary demonstrates that the treatment that falls into this category adds to existing traditional medicine techniques. Alternative implies that these interventions fall outside of the traditional interventions of the predominant medical model. The individual treatment approaches within complementary alternative medicine are considered the second most widely used type of intervention for health care in the United States (Katz & Ali, 2009). However, complementary alternative medicine as an integrated discipline of practice has yet to be a comprehensive form of treatment for patients. Several reasons for opposition to implementing complementary alternative medicine are prevalent in the medical community (Katz & Ali, 2009). Current managed care reimbursements and health care professional resistance to complementary alternative medicine are a result of the lack of evidence of the efficacy of complementary alternative medicine.

A study by Katz and Ali (2009) argued that implementing complementary alternative medicines into the traditional medical model as a mode of treatment has been found to be efficacious in improving patient outcomes provided its ability to respect a patient's beliefs and preferences while also utilizing techniques from the conventional medical model. Essentially, implementing complementary alternative medicine with contemporary, traditional models of medicine is what integrative medicine seeks to achieve (Katz & Ali, 2009).

History of integrated medicine. Integrative medicine is not a new discipline (Katz & Ali, 2009; Kharicha et al., 2004). While the term integrative medicine may be relatively new, the concept is deeply rooted in the preventative medicine model developed in the 1960s (Katz & Ali, 2009). Integrative medicine was popular in the 1980's, but was replaced by a focus on controlling costs through managed care. It has now become a more popular and relevant topic in the field of medicine. In the 1990s medical institutions attempted to implement integrative medicine into their clinics (Katz & Ali, 2009; Maizes et al., 2009a). Patients had identified and expressed a desire for integrative medicine services but because of a continued focus on a disease management model and ongoing managed care demands, many clinics had to close despite the potential for improving patient care (Katz & Ali, 2009; Maizes et al., 2009a). The same decade that saw growth in integrative medicine also saw its decline (Maizes et al., 2009b).

The reimbursement model of the health care system of the United States remains rooted in the disease management model, rather than in preventative care (Katz & Ali, 2009). This model limits the integrative medicine community's ability to render these services due to low or no reimbursement for services rendered. Despite this, integrative medicine began to reappear in the late 1990s and early 2000s in academic health centers (Maizes et al., 2009b). Since that time there have been some outpatient settings that have flourished practicing integrative medicine while others have not. Hospitals have slowly begun to incorporate integrative medicine into their practice by adding complementary alternative medicine techniques including art therapy and other mind-body therapeutic practices (Katz & Ali, 2009; Maizes et al., 2009b). Indeed, a study completed by the American Hospital Association in 2008 found that 37% of hospitals were offering some form of complementary alternative medicine methods (Maizes et al., 2009b). Rather than identify implementation as a result of clinical effectiveness, hospitals indicate that

implementation into their treatment models is mainly because of patient demand.

The same interest generated from hospitals and managed care organizations about cost savings measures is being fostered in outpatient and primary care clinics (Hultberg et al., 2005; Katz & Ali, 2009; Maizes, et al., 2009b; Sommers et al., 2000). An increasing number of primary care clinics and physicians are turning their focus to practicing integrative medicine, especially in the cases of chronic disease management (Katz & Ali, 2009; Maizes, et al., 2009b; McCann, 2010). It affords physicians the opportunity to receive support from other disciplines and can lighten the burden of facilitating best practice approaches for their patients.

Implementing Integrative Medicine

Similar to the various definitions of integrative medicine, the action of implementing it is defined in many ways (Maizes, et al., 2009b). As integrative medicine has become a more popular intervention a variety of techniques for implementation have been proposed (Bray & Rogers, 1995; Kharicha, et al., 2004; Maizes, et al., 2009b). These include integration into higher education for certification or degrees in a variety of disciplines, post educational workshops, seminars and continuing education opportunities (Allen-Meares, 1998; Bray & Rogers, 1995).

Education. According to Bray and Rogers (1995), there are two approaches to practicing integrative medicine. The first is a practitioner that treats a patient independently but with an integrated approach to a patient's health care. The second approach is a practitioner working with other health care professionals with mutually exclusive skill sets to provide collaborative treatment. The literature supports several characteristics of effective health care professional want to practice integrative medicine (Bray & Rogers, 1995; Maizes, et al., 2009b). These characteristics include a willingness to put the patient at the center of the treatment team and developing knowledge and utilization of preventative health screenings (Maizes, et al., 2009b).

An additional educational opportunity identified by Maizes et al. (2009b) indicated that the continued focus of creating curriculum that includes in vivo experiences with other disciplines and understanding their theoretical framework(s). Handron, Diamond & Zlotnik, (2001) reinforced this by explaining that health care professionals must acknowledge that the practice of integrative medicine requires developing mutual patient goals across disciplines. Developing competencies across disciplines will strengthen the practice of integrative medicine and provide opportunities to recognize where preventative care interventions can be implemented especially in chronic health issues (Handron, et al., 2001; Maizes, et al., 2009a; Maizes, et al., 2009b).

Building skill sets. Similar to education, there are several opportunities in practicing integrative medicine where skills can be added to a health care professional's repertoire (Maizes, et al., 2009b). One of these opportunities is self-implementation and promotion (Eisenberg, Davis, Ettner, Appel, Wilkey, Van Rompay & Kessler, 1999; Katz & Ali, 2009; Maizes, et al., 2009b). A health care professional who has integrated complementary alternative medicine techniques into his/her own life can facilitate open and honest communication with his/her patient that is rooted in their own experience. Eisenberg and colleagues (1999) found that a large percentage of patients who have accessed some sort of complementary alternative medicine have not discussed this with his/her doctor. Another opportunity to continue honing a health care professional's skill set is his/her ongoing work with other health care professionals. It is commonly felt that the most ideal forms of health care professional collaboration occur in face-to-face interactions (Bray & Rogers, 1995). Visual collaboration between health care professionals can positively influence patients' perceptions of integrative medicine and can provide modeling behavior that the patient can take with them and practice in their own environments (Kharicha, et al., 2004).

Advantages of Integrative Medicine

Research has demonstrated a growing need to reduce chronic condition costs with more collaborative models of treatment. The ‘cost savings’ measures of breaking services out into their respective disciplines taken by managed care organizations, hospitals and outpatient clinics in the 1980s and 90s is giving way to a more coordinated and integrative medicine model (Sommers et al., 2000). These entities found that the potential cost savings were not as projected and this model created a disjointed, convoluted and complex maze of poor quality of care, reduced efficiency and inadequate access to appropriate and timely treatment. Moreover, patient participation in treatment, satisfaction and overall health outcomes suffered.

Oftentimes hospitalizations or emergency room visits are for concerns related to manageable chronic illnesses (McCann, 2010). Additionally, those who indicated that they do not have a primary care physician have an increased likelihood of overutilization of acute care and emergency services. Some data shows that hospital length of stays can be decreased with intervention at the outpatient level (Lechman & Duder, 2009) while others demonstrate that total number of hospital admissions can be lowered (Baldwin, Inui & Stenkamp, 1993). Baldwin, Inui and Stenkamp (1993) evaluated health care costs using a combination of datum obtained from participant’s answers in a survey and claims datum from several sources including a local hospital and medical center. On average, the study found that the group of individuals who had not received structured interdisciplinary primary care had \$1,000 greater annual medical expenses. The intervention group utilized outpatient services to a greater extent than the control group. However, due to the high cost of inpatient and emergency services and the greater rate with which the control group accessed these services, the control group’s medical costs exceeded those of the intervention group.

Challenges to Implementing Integrative Medicine

Many challenges to implementing integrative medicine have been identified across the literature (Handron et al., 2001; Higgins, 1994; Kharicha et al., 2004; Lesser, 2000; Reese & Sontag, 2001). Primarily, several studies found that a power hierarchy exists in the medical community between health care professionals and can be a barrier to coordinating care (Kharicha et al., 2004; Maizes, et al., 2009b; Reese & Sontag, 2001). Historically, this authoritarian dynamic is deeply entrenched within the medical community, with the medical doctor often being seen as the expert regarding patient care while other health care professionals ‘falling into line’ thereafter. Lesser (2000) and Reese and Sontag (2001) argue that one reason the medical community has been slow to adopt more collaborative models of care because of the danger of blurring the roles each health care professional has for patient care. Additionally, there are various theoretical and value differences across disciplines that are roadblocks to seamless collaborative care (Reese & Sontag, 2001). These differences can impede collaborative care for patients as many disciplines practice within a certain set of skills and treatments and the education health care professionals receive does not readily lend itself to collaboration across disciplines (Handron et al., 2001; Reese & Sontag, 2001). Handron, Diamon and Zlotnik (2001) explain that each discipline has their own set of “pre-packaged interventions” that do not necessarily take advantage of opportunities there may be for collaborative care. According to Bray and Rogers (1995) and Kharicha, Levin, Illiffe and Davey (2004), there is also not a common language across disciplines that would lend itself to naturally occurring collaborative care. Moreover, general practitioners in particular are not necessarily clinical trained to screen for or address patients mental health symptoms that may co-occur with medial diagnoses despite the fact that they see the majority of patients (Higgins, 1994).

Opportunities for Integrative Medicine Research

There are many opportunities to explore in regard to improving interdisciplinary research (Mullins, Balderson & Chaney, 1999). Existing research primarily focuses on developing educational curriculum for graduate or medical school students or on provider-to-provider dynamics and interactions. Moreover, research to date focuses on elderly patient satisfaction, health status and quality of life while cost of medical expenses analyses are rarely incorporated into those studies (Rizzo & Rowe, 2006). Much of the research fails to explore the effects interdisciplinary treatment has on controlling health care costs or on patient's health and wellbeing. Additionally, most interdisciplinary research has not been able to develop a standard definition of interdisciplinary interventions or a theoretical framework to structure the research. Lastly, previous studies have not controlled for participation self selection bias in choosing their medical providers and/or have not conducted randomized studies.

While Kharica, Levin, Illiffe and Davey (2004) stated "The Berlin Wall between health and social care is being dismantled, with the prospect of a unified system of care at the end of the process" (p. 135), they caution that integrative medicine needs refining before it can be successfully implemented. Indeed, the literature agrees that the idea of integrative medicine is good in theory, but has not been very successful in practice (Higgins, 1994; Hultberg et al., 2005; Kharicha et al., 2004; Lesser, 2000). Furthermore, there is little research into the experiences of health care professionals in regards to integrative medicine (Hultberg et al., 2005; Maizes, et al., 2009b).

The challenges of implementing integrative medicine are numerous and although there is theoretical evidence that suggests a collaborative model of medicine there is little research that has been able to support this framework. Integrative medicine has the potential to improve

patient outcomes for medical and/or mental health diagnoses and decrease health care costs although a model to accomplish this has not yet been identified. The research to date has identified a need for integrative medicine to be implemented in a way that is effective from a cost and patient outcome standpoint. Without further research, the door open for this opportunity may well be slammed shut in the faces of researchers and health care professionals. Lacking a coordinated, organized approach to some of the nation's health conditions patient health will suffer while the public at large continues to pay the heavy cost for inaction and improper care.

It is apparent from the review of the literature that more information is needed on the perspectives of integrative medicine from health care professionals who actively practice it. This study sought to discover what experiences health care professionals have had in the practice of integrative medicine and to discover what opportunities and barriers exist to continued work towards integrative medicine across disciplines.

Conceptual Framework

The lens the Health Belief Model (HBM) provides is appropriate for integrative medicine interventions due to its potential to facilitate improved patient health and wellbeing (Hayden, 2009; Hutchinson, 2008). While there would be some value in looking at the proposed research through the traditional medical model, the limitations on integrating patient health with *behaviors* would be difficult. The Health and Belief Model was first introduced in the 1950s and became popular through Marshall Becker's publications in the 1970s. The HBM came out of a simultaneous desire to develop a theory and treatment modality addressing patient perspectives about their health while also improving patient health (Becker, 1974). It is rooted in the theories of Kurt Lewin, which focused on goal setting by taking into account people's motivation for taking action. The model focuses on patients current behaviors and how likely they are to take

action regarding their medical conditions (Becker, 1974, Hayden, 2009; Hutchinson, 2008).

The Health and Belief Model is an ideal framework to study patient attitudes toward their health and health care and by extension understanding health care professionals ability to influence their perspectives. The HBM includes four key concepts in regards to patient behaviors: perceived susceptibility, perceived severity, perceived benefits and perceived behaviors (Hayden, 2009; Janz & Becker, 1984).

Perceived susceptibility is defined in the HBM as the extent to which a patient believes they are at risk for a given medical condition or diagnoses (Hayden, 2009). Perceived susceptibility is considered a motivating factor in patients taking preventative care action. The greater risk the patient feels they are at, the more likely they are to take action. The reverse is also true: research has shown that patients who do not believe they are susceptible to a particular ailment or disease are more likely to engage in unhealthy or risky behaviors. Perceived severity is related to the patient's belief a given diagnosis is serious. Perceived severity is directly related to the extent that a patient understands a diagnosis from a medical perspective (lethality, projected symptoms) but also includes the patient's beliefs about the complications the progression of a disease may have on their quality of life (Hayden, 2009). Combined, perceived susceptibility and severity in the HBM are considered the "energy or force to act" (Becker, 1974).

Conversely, perception of benefits and barriers are considered the "preferred path to action" (Becker, 1974). Perception of benefits is the extent that a patient believes implementation of a new behavior will decrease the likelihood they will develop a disease or that their symptoms will dissipate (Hayden, 2009). Perceived benefits are what encourage patients to continue to take precautions they feel will prevent development of a disease. For example, colon cancer is a treatable disease if detected early enough in the disease process. Colonoscopies are a reliable

way to detect colon cancer. Therefore if a patient is screened and identified as needing a colonoscopy to rule out colon cancer he/she may be more likely to go forward with the procedure knowing that early detection is key to resolving this type of cancer. Perceived barriers are the anticipated barriers to change a patient believes exist. Perceived barriers can be seen as a sort of cost-benefit analysis of all of the information synthesized at the time a decision needs to be made. Examples of perceived barriers may include a belief that the behavior to be added or changed is too difficult for the patient to complete or that he/she may conduct the behavior in an ineffective manner.

Hayden (2009) also explains that due to an increased focus on using the Health Belief Model additional constructs including cues to action, motivating factors and self-efficacy have been added to the model. Cues to action are external influences that either promote or discourage a patient's willingness to change their current behaviors. These environmental contributions can come from society (ie: media coverage) or from personal experiences with friends or family. Motivating factors for a patient's willingness to take action are his or her personal experiences and biases that they have as a result of their cultural or spiritual background and level of education. Lastly, self-efficacy is a patient's belief they can take action. A patient must believe that they are capable of the actions he/she must take to make the change. Indeed, Rosenstock, Strecher and Becker (1988) confirmed that self-efficacy and motivation were an essential component of the model and need to be considered when looking at integrative medicine through the Health Belief Model.

A meta-analysis by Janz and Becker (1984) of HBM interventions found that evaluating patients using this model was a valuable way to understand and address patient behaviors. The research found that of the four key concepts of the HBM, perceived barriers had the most

potential for understanding patients' likelihood of taking action across multiple disciplines and study designs. Perceived susceptibility was found to be the most valuable in understanding the implementation of preventative care behaviors. Health care professionals have an opportunity to influence how patients view their current health conditions and understand what is under their locus of control to change (Janz & Becker, 1984). They can help patients define health in a way that will promote healthy lifestyle changes and support the need to focus on preventative care (Hayden, 2009; Janz & Becker, 1984).

The lens the Health Belief Model provides has not previously been applied to attempting to understand health care professionals experiences practicing integrative medicine. While this may not be surprising provided its focus on patient experiences and behaviors, it has the potential to provide insight within the integrative medicine community in regards to health care professionals viewpoints about the efficacy of integrative medicine rather than the patient view.

The Health and Belief Model was an ideal framework to use to establish methods and measurements for this study. The principles of ensuring that patients are active participants in the management of their health are central to the field of integrative medicine. In using the ideas of perceived aspects of patients' health, this study sought to evaluate how health care practitioners' practice of integrative medicine is influenced by patient attitudes towards the components of the HBM.

Methods

Design

This study was designed to discover health care professionals' experiences in practicing integrative medicine and to determine what opportunities there may be to reduce barriers to continuing to render services according to an integrative medicine model. The hypothesis was

that responses from the participants would provide information related to integrative medicine that had not yet been discussed in the field. This cross-sectional study used a survey for data collection and analysis.

Sampling

This study sought to draw a sample of health care professionals, including social workers, from three local integrative medicine clinics within the Midwest. Agency 1 sampled health care professionals in a short-term residential treatment center for adults with mental health and/or substance abuse diagnoses. Health care professionals at Agency 2 provide a myriad of mental health and substance abuse treatment including outpatient clinic and in-home services. Agency 3 sampled health care professionals from an outpatient clinic that specializes in providing integrative healthcare including holistic services and classes, focusing their efforts on interventions related to chronic illnesses. The unit of measurement for this study was at the individual level. Participants were identified and eligible to participate in the study as long as they were a health care professional that was employed at one of the three clinics where the study was being completed. Additionally, the participant must have also interacted with at least one other health care professional outside of their profession or specialty. A designated contact at each clinic was responsible for distribution of the survey to the health care professionals through email with a link to the survey. The link to the survey allowed participants to securely and privately submit responses to a series of questions related to integrative medicine experiences within their current profession. Participants were recruited through distribution of the survey as described above. A convenience sampling approach was used for this study. The email with the survey information also encouraged health care professionals in the clinic to forward the link onto others within the clinic that would have met the eligibility criteria as above. The researcher

desired to have a sample of approximately 30 people.

Protection of Human Subjects

This study met the requirements of the University of St Thomas Institutional Review Board (UST IRB) in accordance to their guidelines for the protection of human subjects. This included, but was not limited to ensuring subjects' rights and privacy were respected while ensuring that ethical and professional expectations continued to be upheld. Prior to data collection, the researcher obtained approval from the UST IRB as well as each agency the data was going to be collected from. The researcher submitted this proposal for UST IRB approval as well as contacted each agency to obtain permission to ask agency staff to voluntarily participate. The researcher received a letter of approval from the UST IRB as well as from each of the three agencies (Appendix A) confirming their support of the study and permission to contact participants at their agency.

Data collected for the study will be kept no longer than 365 days from the date the data collection was completed. Once a subject submitted a survey online, the data was anonymously transmitted and coded such that there was no identifying information available to the researcher. The data collected remained secured on a laptop that was locked with a password.

Informed consent from the participants was obtained through the participant choosing a "I accept" option on the first page of the online survey. The informed consent (Appendix B) included an explanation of the study and what the results would be used for. It notified the subject that the study was voluntary and they may choose to answer questions fully or in part with no ill effects. Additionally, it was explained that all information obtained in the study would remain confidential and would not be used for any other purposes than stated previously. Contact information for this researcher was provided for any questions or concerns.

Measurement

The survey (Appendix C) administered to participants included a series of closed ended questions with fixed responses including Likert scales in addition to some final open-ended questions that provided a chance for additional information to be gathered in a qualitative format. This study did not use any standardized scales. The questions explored health care professionals understanding of integrative medicine, their experiences practicing integrative medicine and what barriers and opportunities exist to improve integrative medicine. The survey was generated using the Qualtrics program, which formatted the questions in a manner that promoted a fluid survey and provided an opportunity for collecting anonymous responses.

Data Analysis

Data analysis of the quantitative data collected included descriptive statistics of basic demographic information (Age, gender and health care professional background) and bivariate analysis of data from several questions.

Participants

Participants recruited from this study included health care professionals from a variety of disciplines. Forty-one participants initiated the survey across the three agencies mentioned previously. A range of 24 to 31 respondents answered each quantitative question on the survey. Ten participants provided free form text responses to the qualitative questions at the end of the survey.

Findings**Descriptive Statistics**

The first descriptive statistic within this study is health care professional distribution. This nominal variable measured the respondents' professional affiliation. This variable was

operationalized by the question: "What type of health care professional do you identify as?" The response options in the survey were nurse, massage therapist, specialist, social worker, behavioral health professional, administrative and other. The response options of specialist and other requested that the respondent specify their role. Some of the responses under these two categories included exercise physiologist, genetics counselor, and occupational therapist. The findings in Table 1 show that the majority of respondents (10 or 25%) identified themselves as social workers. The second largest groups were nurses (5 or 12.5%) and administrative staff (5 or 12.5%).

Table 1. *Health Care Professional Distribution*

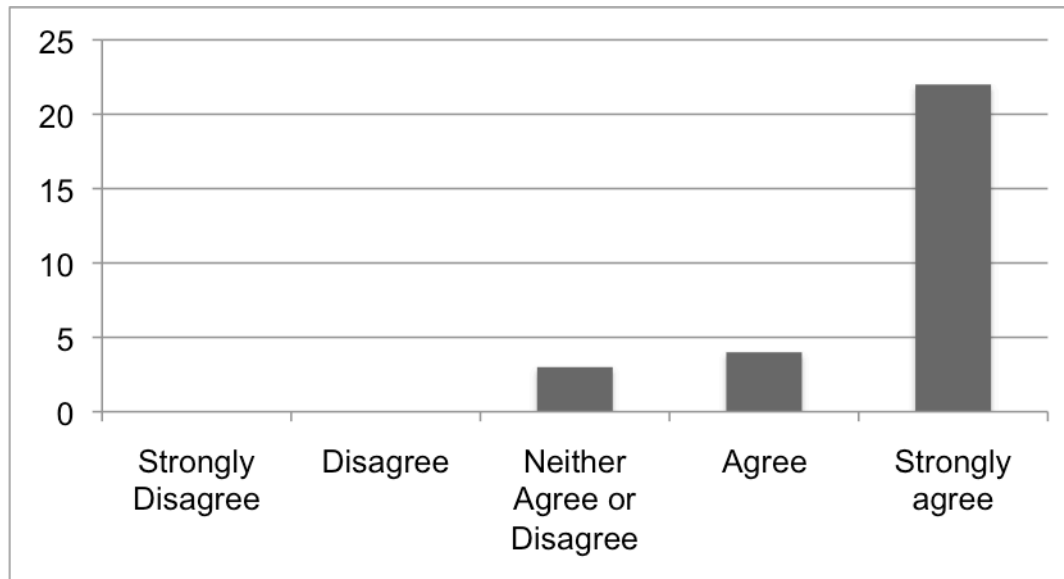
	Frequency	Percent
Nurse	5	15.2
Massage Therapist	1	3
Specialist (please specify)*	2	6.1
Social Worker	10	30.3
Behavioral Health Professional	4	12.1
Administrative	5	15.2
Other (please specify)*	6	18.2
Total	33	100

* Additional professionals included: exercise physiologist, genetic counselor, occupational therapist and (4) mental health practitioners.

The second descriptive statistic within this study is the extent health care professionals believed in the following statement: "I believe the practice of integrative medicine can affect patient outcomes." This nominal variable included a likert scale of responses: Strongly agree, Agree, Neither agree or Disagree, Disagree or Strongly Disagree. The findings in Figure 1 show

that as a whole, participants strongly agreed that practicing integrative medicine could affect patient outcomes (22 or 75.9%).

Figure 1. *Belief in Integrative Medicine*



Bivariate Analysis

Several cross-tabulations demonstrate health care professionals experiences related to integrative medicine. The first cross tabulation shows a health care professional's length of time in practice and the extent of his/her exposure to integrative medicine in his/her professional education. The first question was "How long have you been practicing in your profession?" and included response options of "Less than 1 year, 1 to 5 years, 6 to 10 years, 11 to 15 years or more than 15 years." The second question was "While pursuing your professional education, did you have any experiences related to integrative medicine?" The response options included: There was an entire course, there were several classes within a course, there was one class within a course, it was part of a class discussion, it was briefly mentioned, integrative medicine was not part of the curriculum or none of the above. The length in practice responses for "1 to 5 years" and "more than 15 years" each had 10 participants identify themselves as such. One of the 1 to 5 year

recipients chose “part of a class discussion” as part of their educational experience while three participants in the “more than 15 years” category chose the same response.

Table 2. *Length in Practice and Integrative Medicine Education*

		Educational Experiences Related to Integrative Medicine							
		Entire course	Several classes	One class	Part of a class discussion	Briefly mentioned	Not part of the curriculum	None of the above	Total
Length in Practice	Less than 1 year	0	0	1	0	0	0	1	2
	1 to 5 years	1	0	0	1	2	3	3	10
	6 to 10 years	0	1	0	0	1	4	1	7
	11 to 15 years	0	0	0	0	0	1	1	2
	More than 15 years	0	0	0	3	1	5	1	10

The second cross tabulation evaluates a health care professional’s length of time in practice with belief that the practice of integrative medicine can affect patient outcomes. This question was operationalized by the items “How long have you been practicing your profession?” and “How much do you believe in the following statement?: I believe the practice of integrative medicine can affection patient health outcomes.” The largest number of respondents (9) had more than 15 years of practice and strongly agreed that practicing integrative medicine can positively affect patient outcomes (Table 3).

Table 3. *Length in Practice and Belief in Integrative Medicine*

	"I believe the practice of integrative medicine can improve patient health outcomes." *					
Length in Practice	Strongly Agree		Agree		Neither Agree or Disagree	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Less than 1 year	2	6.9%	0	0.0%	0	0.0%
1 to 5 years	4	13.8%	2	6.9%	2	6.9%
6 to 10 years	5	17.2%	1	3.4%	1	3.4%
11 to 15 years	2	6.9%	0	0.0%	0	0.0%
More than 15 years	9	31.0%	1	3.4%	0	0.0%

* "Disagree" and "Strongly Disagree" are not represented on this table due to no responses.

The final cross tabulation evaluates the diagnoses that may benefit most from an integrative medicine approach and factors that contribute to patient adherence. The top four diagnoses that received responses on the question about what diagnoses most benefited from integrative medicine were selected to be evaluated against the factors health care professionals feel contribute to patient treatment adherence. These diagnoses included pain management, depression, anxiety and other mental health diagnoses. Health care professionals evaluated these diagnoses very similarly on all of the responses, with perceived benefits to accessing care being the most prevalent answer chosen (Table 4).

Table 4. *Diagnoses benefiting from integrative medicine and patient treatment adherence*

	Pain Management	Depression	Anxiety	Other mental health diagnoses
	Frequency			
Perceived susceptibility to a given diagnoses	6	7	7	7
Perceived severity of their diagnoses	12	13	13	12
Perceived benefits to accessing care	14	15	15	13
Perceived barriers to access care	10	11	11	9
External environmental factors	10	10	10	10

Strengths and Limitations

The sample for this study accurately reflected the population of interest as participants practicing at an integrative medicine clinic were identified. The sampling design was limited such that the study used volunteers for responses rather than requiring participation as part of the subject's work requirements. The study utilized a convenience sampling approach and cannot therefore claim representativeness or generalizability beyond the population of health care professionals sampled. The study did not capture health care professionals who practice in independent settings but still utilized an integrative medicine approach. The nature of the questions were mostly professional so that there were no concerns regarding questions the participants may not have wanted to answer or responding in a way they feel they should have.

This study had several strengths in its internal validity. This included elimination of interviewer bias and allowing anonymity through distribution of the survey through the Qualtrics

system. Threats to the internal validity of this study include failure to detect the environmental effects of the study since it was a one-time sample and instrumentation error provided the survey is not a validated one. A threat to external validity of this study included non-response bias – the survey likely had fewer responses than those administered. The degree of sampling error for this study remains unknown and the statistical analysis will not be as strong due to the limited tests that can be conducted.

Discussion

The purpose of this study was to identify experiences a variety of health care professionals have had practicing integrative medicine. The results of the study demonstrated that a wide variety of types of health care professionals feel that work using an integrative medicine model can play an important role in a patient health outcomes. Additionally, there is a consensus that certain diagnoses may benefit from an integrative medicine approach more than others. Perhaps most importantly, this study demonstrated that health care professionals want to continue to discuss an integrative medicine approach in their practices as well as a desire to express their thoughts and feedback about utilizing this approach.

Responses to the free form survey question “How do you define integrative medicine?” shed light on an important part of the discussion surrounding implementing integrative medicine. The definition of integrative medicine is not standardized or operationalized across many if not all of the health care disciplines. While some answers to this question garnered similar definitions, “A collaboration of all involved disciplines in providing treatment to meet the needs of the client” and “All medicines combined, purpose doesn’t matter,” they often left more opportunities for clarification rather than resolution of the question. These differences demonstrate the need for the health care community to come together with the common purpose

of pursuing ways to improving patient health outcomes and with that action, more concrete definitions need to be developed.

The study did not find that a health care professional's length in practice negatively affected their viewpoint on integrative medicine. It may have been surmised that those in practice longer did not have as much exposure to this approach in their education and therefore may not see the value in it. Previous research has shown that the best opportunity to introduce integrative medicine to health care professionals is during their professional education. However, the findings of this study suggest that it does not appear to be a common practice to include integrative medicine as part of curriculum at this time. Those in practice more than 15 years reported they were exposed to more integrative medicine opportunities as part of their professional education than those who had been in practice a lesser amount of time. In fact, the responses received indicated that the longer a health care professional was in practice, the more strongly he/she believed integrative medicine could affect patient health outcomes. Additionally, the years of practice experience health care professionals had could influence his/her perspective on the effectiveness of integrative medicine on certain health conditions. As health care professionals age, they may also increasingly access integrative medicine treatment models for their own health care needs and thereby see through self practice that integrative medicine can provide positive patient health outcomes.

It may be beneficial, therefore, for educational institutions to invest in resources that introduce integrative medicine models into their curriculum. Although some research argues that introducing the concept of integrative medicine is important in educational settings, there appears to be an aspect of exposure to real life settings that is vital to health care professionals buying into the benefits of an integrative medicine model. This supports research that indicates

in vivo educational experiences are an effective means of training for integrative medicine (Allen-Meares, 2000; Bray & Rogers, 1995; Maizes, et al., 2009b). One such opportunity educational institutions could implement would be for health care professionals who have been actively practicing integrative medicine to provide in vivo education and act as role models to participants enrolled in their programs. In this way, health care professionals who are just starting their careers would be provided an opportunity to practice their skills while also collaborating with more seasoned health care professionals.

Implications for Social Work Practice

This study provided valuable information as it pertains to the practice of social work. The findings of the study suggested that there is a need for social workers to be exposed to integrative medicine models in their professional education and in the field. As there has been a shift towards integrative medicine models in the health care community, there is evidence that they may not be fully equipped with all of the tools and skills they will need to be leaders. Responses to the survey demonstrate the continued importance of ensuring social workers are aware of the trending towards integrative medicine as well as the unique opportunity there is for them to start or continue conversations toward patient centered care. As the medical community continues to search for interventions that improve patient health outcomes while working to save costs, social workers will have opportunities to help medical professionals understand that addressing biopsychosocial needs can improve patients' health and wellbeing. Moreover, social workers should be ready to become leaders within interdisciplinary teams provided the systems lenses they often see the world through. Additionally, three of the four diagnoses identified as benefiting the most from an integrative medicine approach were mental health related. There is a need to develop appropriate interventions for those with mental health concerns that can be

utilized by a variety of health care professionals. Research shows that primary care physicians see the majority of patients but they may be the least familiar with all of the tools they have at their disposal to detect and treat mental health symptoms and diagnoses. Social workers must be prepared to provide insight and support to other health care professional disciplines that may be treating patients with comorbid medical and mental health diagnoses.

Implications for Policy

This study has several potential implications for policy at the micro, macro and mezzo levels. At the micro level, agencies can support their health care professionals through policies that encourage them to continue to renew the conversation about health care outcomes with their patients. The findings in this study also suggest an opportunity for agencies and clinics to become involved in developing integrative medicine approaches through operationalizing their mission statements and goals to be applied across health care disciplines. At a macro level, state and federal organizations need to be aware of the trend towards integrative medicine and support the local agencies work in this area through continued measurements of patient health outcomes and funding that reinforces the model. Indeed one health care professional's response seems to support this: "It isn't taken seriously enough. All fields need to focus on treating the entire person utilizing several treatment options." In order to succeed integrative medicine must be taken seriously at every level of practice. The best way to accomplish this is through policies that support an integrative medicine model and challenge all types of health care professionals to practice timely and effective interventions that improve patient health outcomes. Lastly, there are numerous opportunities for interagency collaboration and education through sharing their successes and challenges in implementing policies, mission statements and securing appropriate resources under an integrative medicine model.

Implications for Research

The findings of this study clearly demonstrated that an integrative medicine approach to health care is becoming increasingly popular. It is with this in mind that continued research must focus on integrative medicine approaches and perhaps more importantly, research into the feelings about its success from the eyes of those implementing it: health care professionals. In order to ensure that health care professionals are appropriately trained and supported to accomplish the goals of achieving better patient health outcomes, they must be provided opportunities to provide feedback about their experiences. Future research should focus on continuing to evaluate health care professionals' personal success and failure stories in implementing integrative medicine. Administering ongoing surveys and conducting interviews will go a long way in continuing to improve on existing integrative medicine approaches to treatment. Going forward, this research should not be limited solely to the health care professional already in practice. Research would also be valuable for those currently in professional educational settings. Feedback obtained in those early professional circumstances could also prove beneficial to understanding how best to train those already in practice and those who have not yet begun to practice. Lastly, research that focuses on financial incentives for those improving patient health outcomes may show opportunities where integrative medicine is already making a difference.

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Appendix A

Sample Agency Consent Letter*

*Language below reproduced from letters received from each agency, information removed to protect agency privacy.

Agency Letterhead

Amanda Muenzenmeyer
15560 26th Ave N
Unit A
Plymouth, MN 55447

November 20th, 2012

Dear Ms Muenzenmeyer,

I am writing to confirm that [Agency Name] strongly supports your research proposal to investigate health care professionals' experiences associated with integrative medicine. It is my understanding that this project requests health care professionals and staff complete an online survey about their professional experiences in regards to integrative medicine. Staff members that interact with or provide referrals to at least one health care professional outside their discipline will be eligible to assist you with completing this survey.

It is my understanding that this project entails gathering data in an anonymous fashion with no identifying information being gathered of the staff. I understand that my staff will be informed that the responses they provide will be completely anonymous and that they will not be required to participate in the survey. The data you will gather will identify opportunities and barriers to continuing to provide integrative medicine services to clients.

I look forward to working with you on this project.

Sincerely,

Name
Title

Appendix B

Sample Consent Form

Informed consent language appeared on the first page of the online survey.

Health Care Professionals' Experiences in Integrative Medicine Informed Consent Form

My name is Amanda Muenzenmeyer, a Master of Social Work graduate student at the University of St Thomas. This survey is part of a study to discover health care professionals' experiences in practicing integrative medicine and to determine what opportunities there may be to reduce barriers to continuing to render services according to the integrative medicine model. You will be asked to complete asked 18 questions related to your experiences practicing integrative medicine as a health care professional. You will only be asked to complete the survey once. The survey takes 15-20 minutes to complete.

Your participation in this research is confidential. No personally identifiable information will be connected to any of your responses. You will encounter no known risks or benefits as a result of completing this survey. Participation in this survey is voluntary. You may discontinue the survey at any time with no consequences.

Please contact Amanda Muenzenmeyer at muen0750@stthomas.edu with questions or concerns about this study.

By clicking NEXT (below), you acknowledge the above information and are agreeing to informed consent.

Appendix C

Survey Questions

With what organization are you affiliated? [Agency names have been deidentified.]

- ☐ Agency 1
- ☐ Agency 2
- ☐ Agency 3

What type of health care professional do you identify as?

- ☐ Primary care, general practice doctor or family doctor
- ☐ Doctor of Osteopathy
- ☐ Physician assistant
- ☐ Nurse
- ☐ Nurse Practitioner
- ☐ Acupuncturist
- ☐ Massage Therapist
- ☐ Specialist (please specify) _____
- ☐ Social worker
- ☐ Behavioral health professional
- ☐ Administrative
- ☐ Other (please specify) _____

What is the highest amount of education you have received?

- ☐ Associates degree
- ☐ Bachelors degree
- ☐ Masters degree
- ☐ Doctorate
- ☐ Other degree (please specify) _____
- ☐ Other professional degree/certification (please specify) _____

How long have you been practicing your profession?

- ☐ Less than 1 year
- ☐ 1 to 5 years
- ☐ 6 to 10 years
- ☐ 11 to 15 years
- ☐ More than 15 years

While pursuing your professional education, did you have any experiences related to integrative medicine?

- ☐ There was an entire course
- ☐ There were several classes within a course
- ☐ There was one class within a course
- ☐ It was part of a class discussion

- ☐ It was briefly mentioned
- ☐ Integrative medicine was not part of the curriculum
- ☐ Other (please specify) _____
- ☐ None of the above

Did any of your professional education involve any face-to-face interactions with health care professionals outside of your discipline?

- ☐ Yes
- ☐ No
- ☐ Does not apply

How confident are you with your overall understanding of integrative medicine?

- ☐ Very confident
- ☐ Somewhat confident
- ☐ Neutral
- ☐ Not very confident
- ☐ Not confident at all

How much do you believe in the following statement?

I believe the practice of integrative medicine can affect patient health outcomes.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

In your experience, which particular diagnoses seem to benefit most from an integrative medicine approach? (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Other mental health diagnosis |
| <input type="checkbox"/> Asthma | <input type="checkbox"/> Depression |
| <input type="checkbox"/> Pain Management | <input type="checkbox"/> Anxiety |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> None |
| <input type="checkbox"/> Other (please specify) _____ | |

What type(s) of health care professionals do you most often interact with? (Check all that apply)

- ☐ Primary care, general practice doctor or family doctor
- ☐ Doctor of Osteopathy
- ☐ Physician assistant
- ☐ Nurse
- ☐ Nurse Practitioner
- ☐ Acupuncturist
- ☐ Massage Therapist

- ☐ Specialist (please specify) _____
- ☐ Social worker
- ☐ Behavioral health professional
- ☐ Administrative
- ☐ Other (please specify) _____

How often do you interact with health care professionals outside of your discipline?

- ☐ Never
- ☐ At scheduled intervals (please specify how often) _____
- ☐ As often as is deemed clinically necessary (please specify how often) _____
- ☐ For every patient (please specify how often) _____
- ☐ Other (please specify) _____

What is your most common form of communication with other health care professionals in regards to coordinating patient care?

- ☐ Face to face interaction
- ☐ Email
- ☐ Other electronic communication (ie: electronic medical record system)
- ☐ Telephone
- ☐ Other (please specify) _____

How often are your patient's psychosocial needs discussed between you and health care professionals outside of your discipline?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ All of the time

How often do you discuss psychosocial needs with your patient?

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ All of the time

To what extent do you feel patients understand their diagnoses?

- ☐ Do not understand
- ☐ Understand very little
- ☐ Have limited understanding
- ☐ Mostly understand
- ☐ Fully understand

A common concern for health care professionals regarding patient treatment is what motivates their patients to take responsibility for their health and wellbeing.

What factors do you feel contribute to patients' adherence to their treatment plans? (Check all that apply)

- ☐ Perceived susceptibility to contracting a given diagnoses
- ☐ Perceived severity of their diagnoses
- ☐ Perceived benefits to accessing care
- ☐ Perceived barriers to accessing care
- ☐ External environmental factors
- ☐ Other (please specify) _____

How do you define integrative medicine? _____

What are your recommendations for improving integrative medicine? _____